

Intel® Pentium® 4 Processor 2.20 GHz Small Business Sell-up Guide

Performance With Purpose



Now is the time for businesses to replace their aging desktop PCs and realize the fantastic performance gains of the Intel® Pentium® 4 processor.

Technology research firm Gartner* recommends that businesses purchasing systems today adopt Intel Pentium 4 processor-based PCs running at frequencies of 1.70 GHz or higher¹. Performance PCs based on the Intel Pentium 4 processor provide tested reliability and headroom to help businesses meet their computing needs for today, and tomorrow.

Processor Features	
<i>400 MHz System Bus</i>	Data is moved to and from the CPU up to three times faster than with the Intel® Pentium® III processor, increasing performance for graphics and multitasking.
<i>Streaming SIMD Extensions 2</i>	144 instructions improve performance on graphic intensive applications such as 3D and multimedia.
<i>Rapid Execution Engine</i>	Integer instructions are executed at double the clock speed for greater performance. A 2.20 GHz processor executes integer instructions at 4.40 GHz.
<i>256K and 512K Level 2 Cache</i>	Processors listed as 2 GHz and below are based on a 256K Level 2 cache. Processors listed as 2A GHz and 2.20 GHz are based on a larger 512K Level 2 cache, providing extra performance for all usage models.

Memory Technology

Help get the most out of the Intel Pentium 4 processor platform by selecting the optimal memory solution.

- The Intel® 845 Chipset with SDRAM technology
 - Extends the Pentium 4 processor family of platforms into price-sensitive market segments.
- The Intel 845 Chipset with DDRDRAM technology
 - Provides additional performance for mainstream users.
 - Delivers double² the data transfer of SDRAM.
- The Intel® 850 Chipset with RDRAM* technology
 - Is ideal for mainstream and performance segments, including users of content creation applications, desktop publishing tools or large data sets.
 - Delivers triple² the data transfer rate of SDRAM.

Microsoft* Windows* XP and the Intel® Pentium® 4 Processor

Intel reliability plus the Microsoft* Windows* XP Professional operating system create a rock-solid foundation for business computing. Choose the Intel Pentium 4 processor and Windows* XP Professional for your business desktop.

- Windows* XP Professional with Intel Pentium 4 processor-specific optimizations gives an added boost to 3D rendering, encryption-based security and networking.
- Powerful hardware and software architectures deliver an ultra-responsive user experience, even with heavy multitasking.
- The Intel Pentium 4 processor delivers awesome performance and quality on new, Windows* XP Professional-enabled, rich media capabilities of Windows* Media Encoder*.

Usage Models	Benefits for Small Business	1.50 ³ GHz	1.70 ³ GHz	1.80 ³ GHz	2 ³ GHz	2A ³ GHz	2.20 ³ GHz
	Level 2 Cache Size	256K	256K	256K	256K	512K	512K
<i>Office Productivity and Content Creation (SYSmark[®] 2001)</i>	<ul style="list-style-type: none"> ▪ Shift seamlessly among many open applications. ▪ Maintain user performance while executing background tasks such as virus scans, file encryption, data compression and system backups. ▪ Produce promotional brochures, training videos and rich web sites to advertise your business. ▪ Take advantage of powerful software and make professional quality advertisements and presentation materials in less time. 	Base scenario	+9%	+14%	+23%	+32%	+41%
<i>Internet Performance (WebMark[®] 2001 v 1.0)</i>	<ul style="list-style-type: none"> ▪ Deliver and receive media rich communications with your employees, customers and business partners. ▪ Outstanding performance for Flash[®]-based computer training modules or product demonstrations. 	Base scenario	+10%	+12%	+21%	+29%	+35%

Performance comparisons measured against the Intel[®] Pentium[®] 4 processor at 1.50 GHz.

The Intel Advantage

Performance

Leading-edge performance where it matters the most: multimedia, Flash[®] video, 3-D imaging and collaboration.

Solid history of reliability to protect the business owner's PC investment for years to come.

Compatibility

Rigorous testing ensures compatibility with a vast array of commercial software and hardware.

Optimizations

Microsoft[®] Windows[®] XP operating system and software application optimizations that unleash the benefit of the Intel[®] NetBurst[™] microarchitecture.

Headroom

Based on a completely new microprocessor architecture, the Intel[®] Pentium[®] 4 processor is designed to provide headroom to run software purchased today, and tomorrow.

¹ Gartner[®] Desktop Recommendations: 2H01 Update, Technology Research Note, October 2, 2001: <http://www.gartner.com/reprints/intel/101392.html>

² Based on PC133 SDRAM, PC2100 DDR RAM, PC800 RDRAM.

³ Source: Intel. System Configuration: Pentium[®] 4 processor at 1.50 GHz, 1.70 GHz, 1.80 GHz, 2 GHz, 2A GHz, 2.20 GHz – Intel[®] Desktop Board D850MD, 256MB PC800 RDRAM[®] –45; Intel[®] 850 Chipset Platform – IBM[®] 30GB ATA-100 DTLA-307030 hard drive, Intel[®] chipset INF file v3.200.1008, Intel[®] Application Accelerator Storage Driver v1.01, Leadtek[®] WinFast/nVidia[®] GeForce[®]3 4x AGP, nVidia Detonator[®] 4 v21.81 graphics driver, 1024x768 at 16-bit color, DirectX[®] 8.1, Windows[®] XP, 100 Mbps LAN; Pro/100+ PCI LAN. Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing. For more information on performance tests and on the performance of Intel products, reference www.intel.com/proc/perf/limits.htm

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